

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No.: 09/759,339

REMARKS

Upon entry of the Amendment, Claims 1-3 and 5-10 will be pending in the application. Claim 1 is amended to incorporate the subject matter of Claim 4, and Claim 4 is now canceled.

Entry of the Amendment along with reconsideration and review of the claims on the merits are respectfully requested.

Formal Matters

Applicants appreciate that the Examiner has acknowledged the claim for foreign priority and receipt of the priority document.

Applicants also appreciate that the Examiner has approved the formal drawings filed September 17, 2003.

Substance of Telephonic Interview with the Examiner

On September 1, 2004, the Examiner called Applicants' representative to point out his understanding that the Allen reference assertedly discloses an electroluminescent layer (citing col. 29, lines 35-50). Applicants' representative asked that the Examiner formalize his views regarding Allen as a reference in a new Office Action.

Claim Rejections - 35 U.S.C. § 103

A. Claim 1 is rejected under 35 U.S.C. § 103(a) as assertedly being unpatentable over Allen et al. (U.S. Patent No. 6,111,696).

The Examiner cites Allen as disclosing a diffusely reflecting polarizing film (polarized-light scattering film) for use in an electroluminescent (EL) light source (col. 29, lines 35-44). The Examiner also asserts that since the teachings of Allen apply to an electroluminescent light source suitable for use with the optical film that is a diffuse reflecting polarizing film, the teachings will assertedly be applicable to the recited device in Claim 1.

In addition, the Examiner cites Allen as teaching a polarizing light scatter plate which comprises a light transmitting resin and dispersedly contained therein another resin and the ranges for the refractive indices in two orthogonal directions (i.e., the axis direction and perpendicular direction) are less than 0.05 and greater than 0.05 respectively and assertedly overlap the recited ranges of smaller than 0.03 and from 0.03 to 0.5.

B. Claims 2 and 6-10 are rejected under 35 U.S.C. §103(a) as assertedly being unpatentable over Allen in view of Shirasaki et al. (U.S. Patent No. 6,025,894).

The Examiner cites Shirasaki as disclosing a scatter control member for an organic electro-luminescent light source. Shirasaki is further cited as disclosing that a scattering film (120) is superposed on the electrode substrate (110) (Fig. 35), and that the polarizing surface light source comprising the organic electro-luminescent device has an illuminating planar surface.

The Examiner reasons that it would have been obvious to one having ordinary skill in the art to adapt the polarized-light scattering film disclosed by Allen to the organic electro-luminescent device disclosed by Shirasaki to achieve a compact, high-contrast display with low power consumption that provides a wide view-angle.

C. Claims 3-5 are rejected under 35 U.S.C. §103(a) as assertedly being unpatentable over Allen in view of Shirasaki as applied to Claim 1, and further in view of Pokorny et al. (U.S. Patent No. 6,461,775).

The Examiner cites Pokorny as disclosing a “thermoplastic material having various glass transition temperatures preferably 50 degrees to 150 degrees or greater (Col. 8, lines 58-67) and the phase relationship (col. 8, lines 8-10).” (see Office Action, page 5, second full paragraph).

The Examiner reasons that it would have been obvious to one having ordinary skill in the art to adapt the type of film disclosed by Pokorny to the display device of Allen and Shirasaki to provide an interlayer film to minimize damage and contamination and to reduce distortions.

Applicants respond as follows.

As noted, Applicants have amended independent Claim 1 to incorporate the subject matter of dependent Claim 4, now canceled.

A person of ordinary skill in the art would not have been motivated to combine Pokorny with Allen and Shirasaki. Even if the combination of Pokorny with Allen and Shirasaki were motivated, the combination of these references would still fail to render obvious the present invention as claimed.

The Examiner cites Pokorny as disclosing thermoplastic materials having various glass transition temperatures, which would be adaptable “to the display device of Allen and Shirasaki to provide an interlayer film” (see Office Action, page 5, third full paragraph). However, the Examiner cites to two separate sections of Pokorny describing both a Light-to-Heat Conversion

(LTHC) Layer and an Interlayer. Neither the LTHC layer or the Interlayer appears to be relevant to the diffuse reflective polarizer of Allen, and one of ordinary skill in the art would not be motivated to look to Pokorny for achieving the polarized-light scattering film of the present invention.

Even if Pokorny were combinable with Allen and Shirasaki, the resulting combination would still not disclose or render obvious the present invention. The present invention now requires the direction length element: “wherein the minute regions of the polarized-light scattering film which are dispersedly contained in the light-transmitting resin are formed by phase separation and have a Δn^2 -direction length of from 0.5 to 50 μm as measured in the Δn^2 -direction.” Applicants disclose that from the standpoint of widening the scattering angle and effectively enabling the light not to meet the critical conditions for total internal reflection to thereby improve the efficiency of emission, the Δn^2 -direction length of the minute regions is preferably from 0.5 to 50 μm (see page 16, first full paragraph).

On the other hand, Applicants submit that Pokorny does not disclose or suggest at least the direction length element: “wherein the minute regions of the polarized-light scattering film which are dispersedly contained in the light-transmitting resin are formed by phase separation and have a Δn^2 -direction length of from 0.5 to 50 μm as measured in the Δn^2 -direction.” Thus, Pokorny fails to make up for the deficiencies in Allen and Shirasaki.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the obviousness rejections.

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Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

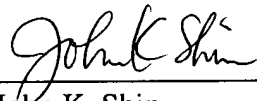
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Date: December 30, 2004